

ABSTRACT

A method for making chlorine dioxide, by passing an aqueous feed solution comprising sodium chlorite into a non-membrane electrolysis cell comprising an anode and a cathode, adjacent to the anode, while flowing electrical current between the anode and the cathode to electrolyze the aqueous feed solution and convert the halogen dioxide salt to halogen dioxide. The anode is preferably a porous anode through which the aqueous feed solution passes to maximize the conversion of chlorite to chlorine dioxide.